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     FILE 'CAPLUS, WPIDS, MEDLINE' ENTERED AT 15:24:59 ON 29 APR 2004
                 E HOFMANN ROBERT/IN,AU
L7             10 S E3-E6
                 E CARPENTER ROBERT/IN,AU
L8             12 S E15-E16
L9             62 S E29-31
L10            84 S L7 OR L8 OR L9
L11             5 S L10 AND (OXIDAT? OR OZON? OR ARTERIOSCLEROSIS OR HEART OR CAR
L12             5 DUP REM L11 (0 DUPLICATES REMOVED)

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L7             10 SEA ("HOFMANN ROBERT"/IN OR "HOFMANN ROBERT"/AU OR "HOFMANN
                  ROBERT F"/IN OR "HOFMANN ROBERT F"/AU)
L8             12 SEA ("CARPENTER ROBERT"/IN OR "CARPENTER ROBERT"/AU)
L9             62 SEA ("CARPENTER ROBERT H"/IN OR "CARPENTER ROBERT H"/AU OR
                  "CARPENTER ROBERT HERON"/AU)
L10            84 SEA L7 OR L8 OR L9
L11             5 SEA L10 AND (OXIDAT? OR OZON? OR ARTERIOSCLEROSIS OR HEART OR
                  CARDIO? OR MENTHOL OR TERPINEOL OR CITRONELLOL OR NEROL OR
                  LINALOOL OR PHYTOL OR GERANIOL OR PERIL? OR GERANYL? OR
                  FARNESOL)
L12             5 DUP REM L11 (0 DUPLICATES REMOVED)
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=> d 1-5 bib ab kwic

L12 ANSWER 1 OF 5 MEDLINE on STN
AN 2003136636 MEDLINE
DN PubMed ID: 12652504
TI Carotid sinus reactions during carotid artery stenting: predictors, incidence, and influence on clinical outcome.
AU Leisch Franz; Kerschner Klaus; **Hofmann Robert**; Steinwender Clemens; Grund Michael; Bibl Dietmar; Leisch Franz A Jr; Bergmann Hans
CS Cardiovascular Division, General Hospital, Linz, Austria.. franz.leisch@akh.linz.at
SO Catheterization and cardiovascular interventions : official journal of the Society for Cardiac Angiography & Interventions, (2003 Apr) 58 (4) 516-23. Journal code: 100884139. ISSN: 1522-1946.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200307
ED Entered STN: 20030325
Last Updated on STN: 20030724
Entered Medline: 20030723
AB Carotid sinus reactions (CSR), defined as asystole >/= 3 sec and hypotension (systolic blood pressure </= 90 mm Hg), are frequent events during carotid artery stenting (CAS). Factors predisposing a patient to CSR as well as the impact of CSR on periprocedural complications have not yet been investigated in a prospective manner. The relationship between various clinical, morphologic, and procedural variables and the occurrence of CSR was examined among 105 consecutive patients undergoing successful CAS. After predilatation with a compliant balloon, tubular-slotted stents were used in all patients. No CSR occurred in 63 (60%) patients, whereas CSR developed in 42 (40%) patients. The most common type of CSR was asystole in combination with short-term hypotension without clinical symptoms. The most important predictor of CSR was bifurcation location of carotid stenosis (bifurcation > ostial > isolated internal carotid artery; P < 0.001). The other independent predictors were presence of contralateral stenosis (P < 0.02), length of stenosis (P < 0.03), and balloon-to-artery ratio (P < 0.02). Occurrence of CSR was unrelated to periprocedural cerebral or **cardiovascular** complications (7.1% vs. 9.5%; NS). We conclude that CSR occurs frequently (40%) during CAS. Bifurcation location of stenosis is the most important predictor of CSR. CSR does not increase the risk of periprocedural complications. Copyright 2003 Wiley-Liss, Inc.
AU Leisch Franz; Kerschner Klaus; **Hofmann Robert**; Steinwender Clemens; Grund Michael; Bibl Dietmar; Leisch Franz A Jr; Bergmann Hans
AB . . . of stenosis (P < 0.03), and balloon-to-artery ratio (P < 0.02). Occurrence of CSR was unrelated to periprocedural cerebral or **cardiovascular** complications (7.1% vs. 9.5%; NS). We conclude that CSR occurs frequently (40%) during CAS. Bifurcation location of stenosis is the. . .
CT . . .
Balloon: AE, adverse effects
Angioplasty, Balloon: MT, methods
*Carotid Sinus: PP, physiopathology
Carotid Stenosis: DI, diagnosis
*Carotid Stenosis: TH, therapy
***Heart Arrest: EP, epidemiology**
Heart Arrest: ET, etiology
*Hypotension: EP, epidemiology
Hypotension: ET, etiology
Incidence

*Intracranial Embolism: EP, epidemiology
Intracranial Embolism: ET, etiology
Logistic. . .

L12 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:777646 CAPLUS
DN 137:284357
TI Targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment
IN **Carpenter, Robert H.**
PA Hofmann, Robert F., USA
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002078623	A2	20021010	WO 2002-US9089	20020322
	WO 2002078623	A3	20040304		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2002177585	A1	20021128	US 2001-822773	20010330
PRAI	US 2001-822773	A	20010330		

AB The use of a pharmaceutical formulation in treating coronary **arteriosclerosis** and a 2-component pharmaceutical formulation are disclosed. The pharmaceutical formulation contains peroxidic species or reaction products resulting from oxidn. of an alkene, such as **geraniol**, by an oxygen-contg. oxidizing agent, such as **ozone**; a penetrating solvent, such as DMSO, a dye contg. a chelated metal, such as hematoporphyrin; and an arom. redox compd., such as benzoquinone. A pharmaceutical formulation was prepd. by sparging an **ozone**/pure oxygen gas mixt. of 120 mg/L up through **geraniol** at 1 L gas/h, maintaining the temp. at 5.degree., stopping the reaction when more than about 50% of the available unsatd. bonds have been reacted, and dilg. the product mixt. DMSO (1:10) to give a soln. or dispersion. Prior to use in the target biol. system, a mixt. of hematoporphyrin, Rose Bengal, and methylnaphthoquinone dry powders was added to the soln. or dispersion in sufficient quantity to create a concn. of 20 .mu.M of each component dispersed therein when delivered to the target biol. system by saline i.v. infusion.

TI Targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment
IN **Carpenter, Robert H.**
AB The use of a pharmaceutical formulation in treating coronary **arteriosclerosis** and a 2-component pharmaceutical formulation are disclosed. The pharmaceutical formulation contains peroxidic species or reaction products resulting from oxidn. of an alkene, such as **geraniol**, by an oxygen-contg. oxidizing agent, such as **ozone**; a penetrating solvent, such as DMSO, a dye contg. a chelated metal, such as hematoporphyrin; and an arom. redox compd., such as benzoquinone. A pharmaceutical formulation was prepd. by sparging an **ozone**/pure oxygen gas mixt. of 120 mg/L up through **geraniol** at 1 L gas/h, maintaining the temp. at 5.degree., stopping the reaction when more than about 50% of the available unsatd.

bonds have been reacted, and dilg. the product mixt. DMSO (1:10) to give a soln. or dispersion. Prior to use in the target biol. system, a mixt. of hematoporphyrin, Rose Bengal, and methylnaphthoquinone dry powders was added to the soln. or dispersion in sufficient quantity to create a concn. of 20 .mu.M of each component dispersed therein when delivered to the target biol. system by saline i.v. infusion.

ST **oxidative** therapeutic **arteriosclerosis**; alkene peroxide **oxidative** therapeutic **arteriosclerosis**

IT Dyes
(chelates with metals; targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT Drug delivery systems
(emollients; targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT Electric field
(pulsed; targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT Oxides (inorganic), biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sesquioxides, reaction with germanium; targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT Electric current
Electron donors
Electroporation
Gravity
Human
Ionizing radiation
Laser radiation
Magnetic field
Phonon
Photon
Plasma
Protozoacides
Redox agents
(targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT Reactive oxygen species
RL: RCT (Reactant); RACT (Reactant or reagent)
(targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT Alkenes, biological studies
Isoprenoids
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT Chlorophyllins
Corrinoids
Fats and Glyceridic oils, biological studies
Glycerophospholipids
Lecithins
Peroxides, biological studies
Porphyrins
Sterols
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT Alcohols, biological studies
Esters, biological studies
Ethers, biological studies
Fatty acids, biological studies
Hydrocarbons, biological studies

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(unsatd.; targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT 106-24-1, **Geraniol**
RL: FMU (Formation, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); RACT (Reactant or reagent); USES (Uses)
(**ozonation**; targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT 3352-57-6, Hydroxy, reactions 10028-15-6, **Ozone**, reactions 11062-77-4, Superoxide 13444-71-8, Periodic acid (HIO4) 14915-07-2, Peroxide
RL: RCT (Reactant); RACT (Reactant or reagent)
(targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT 78-70-6, **Linalool** 89-78-1, **Menthol** 106-22-9, **Citronellol** 106-25-2, **Nerol** 123-35-3, Myrcene 138-86-3, Limonene 150-86-7, **Phytol** 372-75-8, Citrulline 1330-16-1, Pinene 4602-84-0, **Farnesol** 5392-40-5, Citral 7299-42-5, .DELTA.-**Terpineol** 24034-73-9
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT 50-81-7, Ascorbic acid, biological studies 56-49-5, Methylcholanthrene 57-55-6, Propylene glycol, biological studies 58-27-5 61-73-4, Methylene blue 64-17-5, Ethanol, biological studies 67-68-5, DMSO, biological studies 67-71-0, Methylsulfonylmethane 83-88-5, Lactoflavin, biological studies 106-51-4, 2,5-Cyclohexadiene-1,4-dione, biological studies 130-15-4, 1,4-Naphthalenedione 517-28-2, Hematoxylin 536-59-4, **Perillyl** alcohol 548-04-9, Hypericin 553-24-2, Neutral red 2321-07-5, Fluorescein 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-24-6, Strontium, biological studies 7440-31-5, Tin, biological studies 7440-50-8, Copper, biological studies 7440-50-8D, Copper, reaction with sodium chlorophyllins 7440-56-4D, Germanium, oxides 9003-39-8, PVP 11121-48-5, Rose bengal 14459-29-1, Hematoporphyrin 16009-13-5, Hemin 16423-68-0, Erythrosin 17372-87-1, Eosin 189752-49-6, Texaphyrin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

IT 7782-44-7, Oxygen, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(triplet and singlet; targeted **oxidative** therapeutic formulation for **arteriosclerosis** treatment)

L12 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:777645 CAPLUS
DN 137:284356
TI Targeted **oxidative** therapeutic formulation
IN **Hofmann, Robert F.**
PA USA
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002078622	A2	20021010	WO 2002-US9088	20020322

WO 2002078622 A3 20030313
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
US 2003032677 A1 20030213 US 2001-823252 20010330
EP 1385525 A2 20040204 EP 2002-757804 20020322
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRAI US 2001-823252 A 20010330
WO 2002-US9088 W 20020322

AB A pharmaceutical formulation contains peroxide species or reaction products resulting from oxidn. of an alkene, such as **geraniol**, by an oxygen-contg. oxidizing agent such as **ozone**; a penetrating solvent, such as DMSO, a dye contg. a chelated metal, such as hematoporphyrin; and a arom. redox compd., such as benzoquinone. The pharmaceutical formulation is used to treat horses infected with Sarcocystis protozoal infections. A pharmaceutical formulation was prepd. by sparging an **ozone**/pure oxygen gas mixt. of 120 mg/L up through **geraniol** at 1 L gas/h, maintaining the temp. at 5.degree., stopping the reaction when more than about 50% of the available unsatd. bonds have been reacted, and dilg. the product mixt. DMSO (1:10) to give a soln. or dispersion. Prior to use in the target biol. system, a mixt. of hematoporphyrin, Rose Bengal, and methylnaphthoquinone dry powders was added to the soln. or dispersion in sufficient quantity to create a concn. of 20 .mu.M of each component dispersed therein when delivered to the target biol. system by saline i.v. infusion.

TI Targeted **oxidative** therapeutic formulation

IN **Hofmann, Robert F.**

AB A pharmaceutical formulation contains peroxide species or reaction products resulting from oxidn. of an alkene, such as **geraniol**, by an oxygen-contg. oxidizing agent such as **ozone**; a penetrating solvent, such as DMSO, a dye contg. a chelated metal, such as hematoporphyrin; and a arom. redox compd., such as benzoquinone. The pharmaceutical formulation is used to treat horses infected with Sarcocystis protozoal infections. A pharmaceutical formulation was prepd. by sparging an **ozone**/pure oxygen gas mixt. of 120 mg/L up through **geraniol** at 1 L gas/h, maintaining the temp. at 5.degree., stopping the reaction when more than about 50% of the available unsatd. bonds have been reacted, and dilg. the product mixt. DMSO (1:10) to give a soln. or dispersion. Prior to use in the target biol. system, a mixt. of hematoporphyrin, Rose Bengal, and methylnaphthoquinone dry powders was added to the soln. or dispersion in sufficient quantity to create a concn. of 20 .mu.M of each component dispersed therein when delivered to the target biol. system by saline i.v. infusion.

ST targeted **oxidative** therapeutic formulation; alkene peroxide targeted formulation

IT Dyes
(chelates with metals; targeted **oxidative** therapeutic formulation)

IT Drug delivery systems
(emollients; targeted **oxidative** therapeutic formulation)

IT Electric field
(pulsed; targeted **oxidative** therapeutic formulation)

IT Oxides (inorganic), biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sesqui-, reacted with germanium; targeted **oxidative**

therapeutic formulation)

IT Electric current
Electron donors
Electroporation
Gravity
Horse (Equus caballus)
Ionizing radiation
Laser radiation
Magnetic field
Phonon
Photon
Plasma
Protozoacides
Redox agents
(targeted **oxidative** therapeutic formulation)

IT Reactive oxygen species
RL: RCT (Reactant); RACT (Reactant or reagent)
(targeted **oxidative** therapeutic formulation)

IT Alkenes, biological studies
Isoprenoids
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(targeted **oxidative** therapeutic formulation)

IT Chlorophyllins
Corrinoids
Fats and Glyceridic oils, biological studies
Glycerophospholipids
Lecithins
Peroxides, biological studies
Porphyrins
Sterols
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(targeted **oxidative** therapeutic formulation)

IT Alcohols, biological studies
Esters, biological studies
Ethers, biological studies
Fatty acids, biological studies
Hydrocarbons, biological studies
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(unsatd.; targeted **oxidative** therapeutic formulation)

IT 106-24-1, **Geraniol**
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(**ozonated**; targeted **oxidative** therapeutic formulation)

IT 3352-57-6, Hydroxy, reactions 10028-15-6, **Ozone**, reactions 11062-77-4, Superoxide 13444-71-8, Periodic acid (HIO4) 14915-07-2, Peroxide
RL: RCT (Reactant); RACT (Reactant or reagent)
(targeted **oxidative** therapeutic formulation)

IT 78-70-6, **Linalool** 89-78-1, **Menthol** 106-22-9, **Citronellol** 106-25-2, **Nerol** 123-35-3, Myrcene 138-86-3, Limonene 150-86-7, **Phytol** 372-75-8, Citrulline 1330-16-1, Pinene 4602-84-0, **Farnesol** 5392-40-5, Citral 7299-42-5, .DELTA.-**Terpineol** 24034-73-9
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(targeted **oxidative** therapeutic formulation)

IT 50-81-7, Ascorbic acid, biological studies 56-49-5, Methylcholanthrene 57-55-6, Propylene glycol, biological studies 61-73-4, Methylene blue 64-17-5, Ethanol, biological studies 67-68-5, DMSO, biological studies

67-71-0, Methylsulfonylmethane 83-88-5, Lactoflavin, biological studies 106-51-4, 2,5-Cyclohexadiene-1,4-dione, biological studies 130-15-4, 1,4-Naphthalenedione 517-28-2, Hematoxylin 536-59-4, **Perillyl** alcohol 548-04-9, Hypericin 553-24-2, Neutral red 2321-07-5, Fluorescein 7439-89-6, Iron, biological studies 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese, biological studies 7440-24-6, Strontium, biological studies 7440-31-5, Tin, biological studies 7440-50-8, Copper, biological studies 7440-50-8D, Copper, reaction with sodium chlorophyllin 7440-56-4D, Germanium, reaction with oxides 9003-39-8, Polyvinylpyrrolidone 11121-48-5, Rose bengal 14459-29-1, Hematoporphyrin 16009-13-5, Hemin 16423-68-0, Erythrosin 17372-87-1, Eosin 29595-63-9 189752-49-6, Texaphyrin
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(targeted **oxidative** therapeutic formulation)

IT 7782-44-7, Oxygen, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(triplet and singlet; targeted **oxidative** therapeutic formulation)

L12 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:492934 CAPLUS
DN 137:163984
TI The tissue distribution of the mRNA of ghrelin and subtypes of its receptor GHS-R, in humans
AU Gnanapavan, Sharmilee; Kola, Blerina; Bustin, Stephen A.; Morris, Damian G.; McGee, Patrick; Fairclough, Peter; Bhattacharya, Satya; **Carpenter, Robert**; Grossman, Ashley B.; Korbonits, Marta
CS Department of Endocrinology, St. Bartholomew's and the Royal London Hospital, London, EC1A 7BE, UK
SO Journal of Clinical Endocrinology and Metabolism (2002), 87(6), 2988-2991
CODEN: JCEMAZ; ISSN: 0021-972X
PB Endocrine Society
DT Journal
LA English
AB Ghrelin is a novel growth hormone-releasing peptide, originally identified in the rat stomach as the endogenous ligand for the growth hormone secretagogue-receptor (GHS-R1a). Ghrelin is involved in the regulation of GH release, but it has recently been suggested that ghrelin may have other actions, including effects on appetite, carbohydrate metab., **heart**, kidney, pancreas, gonads, and cell proliferation. The distribution of ghrelin, its functional receptor (type 1a) and the unspliced, nonfunctional GHS-R type 1b mRNA expression was investigated in various human tissues using classical and real-time reverse transcription and polymerase chain reaction. GHS-R1a was predominantly expressed in the pituitary and at much lower levels in the thyroid gland, pancreas, spleen, myocardium and adrenal gland. In contrast, ghrelin was found in the stomach, other parts of the gut and, indeed, in all the tissues studied (adrenal gland, atrium, breast, buccal mucosa, esophagus, Fallopian tube, fat tissue, gall bladder, human lymphocytes, ileum, kidney, left colon, liver, lung, lymph node, muscle, myocardium, ovary, pancreas, pituitary, placenta, prostate, right colon, skin, spleen, testis, thyroid, and vein). GHS-R1b expression was also widespread in all tissues studied. The significance of the widespread tissue distribution of ghrelin remains to be detd. These data suggest that ghrelin might have widespread physiol. effects via different, partly unidentified, subtypes of the GHS-R in endocrine and non-endocrine tissues.
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
AU Gnanapavan, Sharmilee; Kola, Blerina; Bustin, Stephen A.; Morris, Damian G.; McGee, Patrick; Fairclough, Peter; Bhattacharya, Satya; **Carpenter, Robert**; Grossman, Ashley B.; Korbonits, Marta
AB Ghrelin is a novel growth hormone-releasing peptide, originally identified

in the rat stomach as the endogenous ligand for the growth hormone secretagogue-receptor (GHS-R1a). Ghrelin is involved in the regulation of GH release, but it has recently been suggested that ghrelin may have other actions, including effects on appetite, carbohydrate metab., **heart**, kidney, pancreas, gonads, and cell proliferation. The distribution of ghrelin, its functional receptor (type 1a) and the unspliced, nonfunctional GHS-R type 1b mRNA expression was investigated in various human tissues using classical and real-time reverse transcription and polymerase chain reaction. GHS-R1a was predominantly expressed in the pituitary and at much lower levels in the thyroid gland, pancreas, spleen, myocardium and adrenal gland. In contrast, ghrelin was found in the stomach, other parts of the gut and, indeed, in all the tissues studied (adrenal gland, atrium, breast, buccal mucosa, esophagus, Fallopian tube, fat tissue, gall bladder, human lymphocytes, ileum, kidney, left colon, liver, lung, lymph node, muscle, myocardium, ovary, pancreas, pituitary, placenta, prostate, right colon, skin, spleen, testis, thyroid, and vein). GHS-R1b expression was also widespread in all tissues studied. The significance of the widespread tissue distribution of ghrelin remains to be detd. These data suggest that ghrelin might have widespread physiol. effects via different, partly unidentified, subtypes of the GHS-R in endocrine and non-endocrine tissues.

IT Adipose tissue
Adrenal gland
Bladder
Esophagus
Gallbladder
Heart
Human
Kidney
Liver
Lung
Lymph node
Lymphocyte
Mammary gland
Muscle
Ovary
Oviduct
Pancreas
Pituitary gland
Placenta
Prostate gland
Skin
Spleen
Stomach
Testis
Thyroid gland
Vein
(ghrelin and its receptor GHS-R subtypes mRNAs distribution in human tissues)

L12 ANSWER 5 OF 5 MEDLINE on STN
AN 2002308154 MEDLINE
DN PubMed ID: 12050285
TI The tissue distribution of the mRNA of ghrelin and subtypes of its receptor, GHS-R, in humans.
AU Gnanapavan Sharmilee; Kola Blerina; Bustin Stephen A; Morris Damian G; McGee Patrick; Fairclough Peter; Bhattacharya Satya; **Carpenter Robert**; Grossman Ashley B; Korbonits Marta
CS Department of Endocrinology, St. Bartholomew's and the Royal London Hospital, London ECIA 7BE, UK.
SO Journal of clinical endocrinology and metabolism, (2002 Jun) 87 (6) 2988. Journal code: 0375362. ISSN: 0021-972X.

CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 200207
ED Entered STN: 20020611
Last Updated on STN: 20020704
Entered Medline: 20020703

AB Ghrelin is a novel growth hormone-releasing peptide, originally identified in the rat stomach as the endogenous ligand for the growth hormone secretagogue-receptor (GHS-R1a). Ghrelin is involved in the regulation of GH release, but it has recently been suggested that ghrelin may have other actions, including effects on appetite, carbohydrate metabolism, **heart**, kidney, pancreas, gonads, and cell proliferation. The distribution of ghrelin, its functional receptor (type 1a) and the unspliced, non-functional GHS-R type 1b mRNA expression was investigated in various human tissues using classical and real-time reverse transcription and polymerase chain reaction. GHS-R1a was predominantly expressed in the pituitary and at much lower levels in the thyroid gland, pancreas, spleen, myocardium and adrenal gland. In contrast, ghrelin was found in the stomach, other parts of the gut and, indeed, in all the tissues studied (adrenal gland, atrium, breast, buccal mucosa, esophagus, Fallopian tube, fat tissue, gall bladder, human lymphocytes, ileum, kidney, left colon, liver, lung, lymph node, muscle, muscle, myocardium, ovary, pancreas, pituitary, placenta, prostate, right colon, skin, spleen, testis, thyroid, and vein). GHS-R1b expression was also widespread in all tissues studied. The significance of the widespread tissue distribution of ghrelin remains to be determined. These data suggest that ghrelin might have widespread physiological effects via different, partly unidentified, subtypes of the GHS-R in endocrine and non-endocrine tissues.

AU Gnanapavan Sharmilee; Kola Blerina; Bustin Stephen A; Morris Damian G; McGee Patrick; Fairclough Peter; Bhattacharya Satya; **Carpenter Robert**; Grossman Ashley B; Korbonits Marta

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